

First, Applicants wish to thank Examiner Ferris for the April 9, 2004 personal interview at which time the outstanding issues in this case were discussed. During the interview, Applicants presented arguments substantially as indicated in this response. Agreement was reached that the cited reference to Puri et al. does not appear to teach the claim limitation relating to segmentation.

With regard to the content of the Office Action, as discussed in the April 9th interview, the Official Action explicitly withdraws the previous rejection based on the cited reference to Wang, however, the Official Action then applies the Wang reference in the Office Action. Applicants appreciate Examiner Ferris' explanation that this was due to a clerical error that resulted in a draft version of the office action being mailed to Applicants. Examiner Ferris agreed that because of this error, the rejection was unclear and any future Office Action would not be final.

Turning now the merits, Applicants Claims 1 and 14 recite a communications node and packet transfer method including dividing a packet to be transmitted into segments to form a plurality of packet segments, and selecting an error correction scheme from among a plurality of error correction schemes to be employed for each of the packet segments in accordance with error resistance of each of the packet segments, the error resistance being determined by the content of each packet segment. Also recited is carrying out an error correction process on each packet segment with the selected error correction scheme, and transmitting each process packet segment to a network.

Thus, Applicants claims recite a communication system and method which divides a packet to be transmitted into segments to form a plurality of packet segments, and selects of an

error correction scheme based on the error resistance of each of the packet segments. For example, as shown in Figures 10 and 11 of the present application, a packet 1001 is divided into three segments 1002-1004 to form three packet segments 1005-1007, which are transmitted to the network. With this configuration, when a header portion and a payload portion of a packet to be transmitted have different error resistance characteristics, the packet can be transmitted to a network under selection of error correction schemes suitable for the respective error resistance characteristics.¹ This feature of the claimed invention helps mitigate the prior art problem of reduced throughput caused by an entire packet being discarded if a bit error occurs in the header portion of the packet.

In contrast, the cited references do not disclose dividing a packet to be transmitted into segments to form a plurality of packet segments. Specifically, Figure 29 on page 45 of Puri et al. shows a FlexMux-PDU that is to be ultimately transmitted to a network. The Flex-Mux-PDU includes index, length and version as a header, and AL-PDUs as a payload. Further each AL-PDU includes a header and a Payload. Thus, the FlexMux-PDU that is transmitted is configured with nested payloads. As agreed in the April 9th interview, this disclosure of Puri et al. teaches dividing received FlexMux-PDU into AL-PDUs and does not teach that a packet to be transmitted is divided into segments to form a plurality of packet segments as required by Claims 1 and 14.

While the Official Action does not cite Elaoud et al. or Adolph et al. for teaching that a packet to be transmitted is divided into segments to form a plurality of packet segments, Applicants note that these references do not correct the deficiencies of Puri et al. Specifically,

¹Applicants' specification at page 3, lines 18-21.

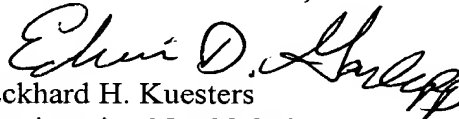
Elaoud et al. merely teaches a Adaptive Forward Error-Correction Scheme that uses a minimum number of data bits to convey message packets. Adolph et al. teaches a data hierarchy method wherein header information items of a data stream are transmitted on a different transmission subchannel having a higher error correction protection. There is no discussion in either Elaoud et al. or Adolph et al. of a packet to be transmitted being divided into segments to form a plurality of packet segments as recited in independent Claims 1 and 14. Thus, Claims 1 and 14 patentably define over the cited references.

As independent Claims 1 and 14 patentably define over the cited references as discussed above, the remaining claims pending in the present application also patentably define over the cited references as these remaining claims depend from independent Claims 1, and 14.

Consequently, in view of the present response, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. An early and favorable action is therefore respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.


Eckhard H. Kuesters
Registration No. 28,870
Edwin D. Garlepp
Registration No. 45,330

Customer Number
22850

Tel: (703)413-3000
Fax: (703)413-2220